

Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	USA Waste of Virginia Landfills, Inc.
Facility Name:	Bethel Landfill
Facility Location:	100 North Park Lane Hampton, Virginia 23666
Registration Number:	61291
Permit Number:	TRO61291

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through IX)
State Only Enforceable Requirements (Section X)

April 28, 2003

Effective Date

March 29, 2007

Amended Date

April 28, 2008

Expiration Date

Francis L. Daniel, Regional Director

March 29, 2007

Signature Date

Table of Contents, 2 pages
Permit Conditions, 29 pages

Table of Contents

I. FACILITY INFORMATION.....	4
II. EMISSION UNITS.....	5
III. LANDFILL OPERATIONS AND FUEL BURNING EQUIPMENT REQUIREMENTS – (EMISSION UNIT ID# LFO-1, P001, P001A, F001 AND EG 1 - EG6).....	6
A. LIMITATIONS	6
B. MONITORING	10
C. RECORDKEEPING	13
D. TESTING	15
E. REPORTING.....	16
F. REQUIREMENTS FOR LANDFILL CLOSURE	17
IV. FACILITY WIDE CONDITIONS.....	18
A. LIMITATIONS	18
V. INSIGNIFICANT EMISSION UNITS	19
VI. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	20
VII. GENERAL CONDITIONS	20
A. FEDERAL ENFORCEABILITY	20
B. PERMIT EXPIRATION	20
C. RECORDKEEPING AND REPORTING.....	21
D. ANNUAL COMPLIANCE CERTIFICATION.....	22
E. PERMIT DEVIATION REPORTING	23
F. FAILURE/MALFUNCTION REPORTING.....	23
G. SEVERABILITY	23
H. DUTY TO COMPLY.....	23
I. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.....	24
J. PERMIT MODIFICATION	24

K. PROPERTY RIGHTS	24
L. DUTY TO SUBMIT INFORMATION	24
M. DUTY TO PAY PERMIT FEES.....	24
N. FUGITIVE DUST EMISSION STANDARDS.....	24
O. STARTUP, SHUTDOWN, AND MALFUNCTION	25
P. ALTERNATIVE OPERATING SCENARIOS	25
Q. INSPECTION AND ENTRY REQUIREMENTS	25
R. REOPENING FOR CAUSE	26
S. PERMIT AVAILABILITY	26
T. TRANSFER OF PERMITS.....	26
U. MALFUNCTION AS AN AFFIRMATIVE DEFENSE	27
V. PERMIT REVOCATION OR TERMINATION FOR CAUSE	27
W. DUTY TO SUPPLEMENT OR CORRECT APPLICATION	28
X. STRATOSPHERIC OZONE PROTECTION.....	28
Y. ASBESTOS REQUIREMENTS.....	28
Z. ACCIDENTAL RELEASE PREVENTION	28
AA. CHANGES TO PERMITS FOR EMISSIONS TRADING.....	28
BB. EMISSIONS TRADING.....	28
VIII. STATE-ONLY ENFORCEABLE REQUIREMENTS	29

I. Facility Information

Permittee
USA Waste of Virginia Landfills, Inc.
100 North Park Lane
Hampton, Virginia 23666

Responsible Official
Mr. Lee Wilson
Director of Landfill Operations

Facility
Bethel Landfill
100 North Park Lane
Hampton, Virginia 23666

Contact Person
Mr. Jim Loveland
Market Area Engineer
757-766-3033

County-Plant Identification Number: 51-650-00093

Facility Description: NAICS 562212 – SIC Code 4593/4911 – Municipal solid waste landfill with gas collection system and energy recovery system.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
P001	V001	Enclosed Flare	12' D x 40' H	Controls NMOCs	P001	NMOCs	July 25, 2006
P001A	V002	Open (candle) Flare	1.0' D x 50' H	Controls NMOCs	P001A	NMOCs	July 25, 2006
F001	F001	Propane fueled engine/generator	95KW/135 Hp	None	N/A	N/A	July 25, 2006
EG1 to EG6	STACK-1 to STACK-6	LFG-fueled engine/generators	10.1 mmBtu per hour each	Combusts and Controls NMOCs	EG1 to EG6	NMOCs	July 25, 2006
Liquid Storage Tanks							
P003	N/A	Diesel Fuel Storage Tank	10,000 gallons	None	N/A	VOC	None
P009	N/A	Leachate Storage Tank	120,000 gallons	None	N/A	VOC	None
Process: Landfill Operations							
LFO-1 (includes GCCS-1)	N/A	Landfill Operations, including a Landfill Gas Collection System	49.5 x 10 ⁶ m ³ landfill volume. GCCS-1 is rated at 4300 cfm.	Landfill Gas Collection and Control System	GCCS-1	NMOCs	July, 25, 2006

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

III. Landfill Operations and Fuel Burning Equipment Requirements – (emission unit ID# LFO-1, P001, P001A, F001 and EG 1 - EG6)

A. Limitations

1. **The Gas Collection and Control System (GCCS)** – The permittee shall operate an active collection and control system, approved by the Administrator that captures the gas generated within the landfill. The GCCS installed at the Bethel Landfill shall be designed in accordance with 40 CFR 60.752 (b) (2) (ii) (A). The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment. The system shall collect gas from each cell in the landfill in which solid waste has been placed for a period of 5 years or more if active or 2 years or more if closed or at final grade. The system shall collect gas at a sufficient extraction rate to meet all operational requirements. Also, the system shall be designed to minimize the off-site migration of subsurface gas. Based on the USA Waste Title V application, NMOC generation rates as of January 21, 1998 are calculated as more than 50 megagrams per year (Mg/yr). Therefore, it is the responsibility of USA Waste to keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
(9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(ii)(A), 40 CFR 753 and 40 CFR 758 (d))
2. **NMOC Emissions Controls** – Non-Methane Organic Compounds (NMOC) contained in the landfill gas shall be controlled by burning in multiple combustion devices. The combustion devices: an open flare, an enclosed flare and six (6) Caterpillar engine/generators shall be provided with adequate access for inspection. A sufficient number of control devices shall be in operation at all times to combust the entire flow of landfill gas from the GCCS system.
(9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(iii)(B), 40 CFR 60.756 (b)(1) and Condition 2 of NSR Permit issued July 25, 2006)
3. **NMOC Controls Efficiency** – The enclosed flare, P001 shall achieve a control efficiency, by stack test for NMOCs of no less than 98 percent, on a mass basis or reduce C_{NMOC} to 20 ppm or less, dry basis, as hexane at three percent oxygen.
(9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(iii)(B), 40 CFR 60.756 (b)(1) and Condition 3 of NSR Permit issued July 25, 2006)
4. **Fugitive Dust Emission Controls** – Fugitive dust and Fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. All cover material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions, as appropriate.
 - b. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water or suitable chemicals or equivalent methods as approved by the DEQ.

- c. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance road to the facility up to the vicinity of the process areas. Trucks leaving the site shall have clean wheels achieved by use of a wheel washer or equivalent. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed or wetted to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, 9 VAC 5-50-90 and Condition 4 of NSR Permit issued July 25, 2006)

5. **GCCS Operation** - The primary purpose of the GCCS is to control the migration of methane gas. The permittee shall operate the collection system such that the surface methane concentration is less than 500 ppm above the background level at the surface of the landfill. A negative pressure shall be maintained at each active wellhead except in case of fire, increased well temperature, use of a geomembrane or synthetic cover, or at a decommissioned well. The permittee shall operate each interior, active wellhead in the collection system such that the gas temperature is less than 55 degrees Celsius and with either nitrogen level less than 20% or an oxygen level less than 5%.

(9 VAC 5-80-110, 40 CFR 60.753 (b), (c) and (d))

6. **Operating Parameters** – The provisions for oxygen, nitrogen, temperature, pressure and surface methane concentrations shall apply at all times except during periods of start up, shut down, or malfunction, provided that the duration of the start up, shut down, or malfunction does not exceed 5 days for collection systems and does not exceed 1 hour for treatment or control devices.

(9 VAC 5-80-110 and 40 CFR 60.755(e))

7. **GCCS Shut down** – The permittee shall operate the GCCS system such that all collected gas is routed to one or more control devices. In the event that the collection and control system malfunctions, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within 1 hour.

(9 VAC 5-80-110 and 40 CFR 60.753(e))

8. **Operational Integrity** – The permittee shall operate the control or treatment systems at all times that gas is being collected by the GCCS system. Control devices include the enclosed flare, the open flare and the engine/generators.

(9 VAC 5-80-110 and 40 CFR 60.753 (f))

9. **Placement of New Wells** – The permittee shall place each well or design component as specified in the GCCS design plan and shall install wells no later than 60 days after the date on which the initial solid waste has been in place in any cell or group of cells for a period of 5 years or more if active or 2 years or more if closed or at final grade.

(9 VAC 5-80-110 and 40 CFR 60.755 (b))

10. **NSPS Subpart WWW** – The municipal solid waste landfill, as well as the GCCS shall be constructed and operated in accordance with 40 CFR 60, Subpart WWW. When 'The Administrator' is prescribed as the recipient of reports required by this Subpart, it shall be understood to be the Director, Tidewater Regional Office.

(9 VAC 5-80-110, 40 CFR 60.750 through 40 CFR 60.759 and Condition 10 of NSR Permit issued July 25, 2006)

11. **Operating Hours** – The emergency generator/Waukesha engine shall be used only for providing power at the location during interruption of service from the normal power supplier, periodic maintenance testing and operational training. Total use for the emergency generator may not exceed 500 hours per year, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110 and Condition 7 of NSR Permit issued July 25, 2006)

12. **Approved Fuels** – The approved fuels for the combustion equipment are as follows:

Caterpillar engine/generators (6)	Treated Landfill Gas
Emergency generator	Liquefied Petroleum Gas (LPG)
Flares (2)	Untreated Landfill Gas

Any request to add a new fuel or a new fuel-burning device may require a permit. A pilot light on the open flare device is fueled with Liquefied Petroleum Gas.

(9 VAC 5-80-110 and Condition 9 of NSR Permit issued July 25, 2006)

13. **Throughput Limit** – The throughput of landfill gas (LFG) shall not exceed 2.32×10^9 cubic feet, dry basis of landfill gas per year at standard atmospheric conditions (68°F and 14.7 psi), calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months (9 VAC 5-80-110 and Condition 8 of NSR Permit issued July 25, 2006 Permit)

14. **Facility-wide Emission Limits** – Total emissions from the operation of the Landfill Gas fuel-burning equipment shall not exceed the limits specified below:

PM-10	12.6 tons/yr
Sulfur Dioxide	19.7 tons/yr
Nitrogen Oxides (as NO ₂)	127.5 tons/yr
Carbon Monoxide	279.8 tons/yr
VOC (as NMOC)	26.2 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.1-13 and III.C.1 & 2.

(9 VAC 5-80-110 and Condition 11 of NSR Permit issued July 25, 2006)

15. **Emission Limits** - Emissions from the operation of the six (6) Caterpillar engine/generators shall not exceed the limits specified below:

	<u>each engine</u>	<u>combined</u>	
PM-10	0.03 lbs/hr	0.8 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	0.16 lbs/hr	4.1 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	3.8 lbs/hr	99.8 tons/yr	(9 VAC 5-50-260)

Carbon Monoxide	6.8 lbs/hr	179.7 tons/yr	(9 VAC 5-50-260)
VOC (as NMOC)	0.08 lbs/hr	2.2 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.2, 12, 13 and III.C.1 & 2.

(9 VAC 5-80-110 and Condition 12 of NSR Permit issued July 25, 2006)

16. **Emission Limits** - Emissions from the operation of the enclosed flare system shall not exceed the limits specified below:

PM-10	2.7 lbs/hr	11.8 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	2.6 lbs/hr	11.5 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	13.4 lbs/hr	58.6 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	19.9 lbs/hr	87.3 tons/yr	(9 VAC 5-50-260)
VOC (as NMOC)	5.2 lbs/hr	22.8 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.2, 3, 10, 12, 13, III.B.1, 2, and III.C.1 & 2.

(9 VAC 5-80-110 and Condition 13 of NSR Permit issued July 25, 2006)

17. **Visible Emission Limit** - Visible Emissions from the landfill gas fuel burning equipment, not to include the open flare, shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition 14 of NSR Permit issued July 25, 2006)

18. **Visible Emission Limit** – The open flare P001A, when it is being utilized, shall be operated with no visible emissions as determined by EPA Method 22 except for periods not to exceed a total of 5 minutes during 2 consecutive hours. This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and 40 CFR 60.18)

19. **Combustion Emissions** – Combustion equipment emissions shall be controlled by proper operation and maintenance. Equipment operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

(9 VAC 5-80-110)

20. **Startup, Shutdown and Malfunction Plan** – As an affected source, the Bethel Landfill is categorized as an ‘existing landfill’ in 40 CFR Part 63, Subpart AAAA. The additional requirements beyond those imposed in the NSPS include development of the ‘SSM’ plan and the start of semi-annual reporting for the GCCS system, beginning January 16, 2004. (9 VAC 5-80-110, 40 CFR 63.1930 through 63.1990 and Condition 15 of NSR Permit issued July 25, 2006)

B. Monitoring

1. **Well Pressure** – The permittee shall measure gauge pressure in the header at each individual active well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. Exceptions to this requirement are listed under 40 CFR 60.753 (b)(1)-(b)(3). If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements. (9 VAC 5-80-110, 40 CFR 60.753 (g) and 40 CFR 60.755 (a)(3))
2. **Well Parameters** – The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements (9 VAC 5-80-110, 40 CFR 753 (g) and 40 CFR 60.755 (a)(5))
3. **Updated Surface Monitoring Design Plan** – The permittee has submitted to EPA, Region III, an Updated Surface Monitoring Design Plan which is current as of March, 2005. Under the Consent Order signed with EPA Region III on December 4, 2004, the facility is required to show compliance with this updated plan in future records and reports of surface monitoring. (9 VAC 5-80-110)
4. **Surface Monitoring** – The permittee shall monitor surface concentration of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals for each collection area for which waste has been in place for two or more years if closed or at final grade or for which waste has been in place for five or more years if active. This surface methane monitoring shall take place on a quarterly basis and using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. Areas with steep slopes, the active working face or other dangerous areas have been excluded from this monitoring as approved by the Director, Tidewater Regional Office. (9 VAC 5-80-110 and 40 CFR 60.755 (c)(1))

5. **Surface Monitoring** – The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60, Appendix A, Method 21, Section 8.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
(9 VAC 5-80-110)
6. **Surface Monitoring Method of Operation** – The portable analyzer used to determine the surface methane concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix A, Method 21, Section 3, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in Section 3.1.3 of Method 21, the instrument evaluation procedures in Section 4.4 of Method 21, of Appendix A shall be used. The calibration procedures in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.
(9 VAC 5-80-110 and 40 CFR 60.755 (d))
7. **Exceedances** – Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.
 - a. The location of the exceedance shall be marked and recorded.
 - b. The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be remonitored within 10 calendar days of detecting the exceedance.
 - c. If the remonitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the location, the permittee shall install a new well or other collection device within 120 calendar days after the initial exceedance.
 - d. Any location that initially showed an exceedance but has methane concentration less than 500 ppm above background at the 10-day remonitoring shall be remonitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring. If the 1-month remonitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (c) or (e) of this condition.
 - e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background 3 times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director, Tidewater Regional Office.
(9 VAC 5-80-110 and 40 CFR 60.755 (c)(4)(i) through 60.755 (c)(4)(v))

8. **Cover Integrity** – The permittee shall implement a program to monitor for cover integrity and accomplish cover repairs as necessary on a monthly basis.
(9 VAC 5-80-110 and 40 CFR 60.755 (c)(5))
9. **Sampling Ports** – The permittee shall install a sampling port and a port for temperature measurements at each wellhead. The permittee shall measure the gauge pressure in the gas collection header on a monthly schedule. The permittee shall monitor temperature and nitrogen or oxygen concentrations in the landfill gas, at each wellhead, on a monthly schedule.
(9 VAC 5-80-110 and 40 CFR 60.756 (a))
10. **Monitoring Devices** – The GCCS shall be equipped with a continuous gas flow measuring device that shall record flow to, or bypass from, the landfill gas flares at least every 15 minutes. The enclosed flare shall be equipped with a continuous temperature recorder to ensure the proper operation of the flare on a continuing basis.
Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be active whenever the associated combustion equipment is processing landfill gas. Any periods of malfunction of these monitoring devices shall be recorded as defined in Condition III.C.8.
(9 VAC 5-80-110, 9 VAC 5-50-20 C, 40 CFR 60.756 (b)(1) & (b)(2), (c) and Condition 5 of NSR Permit issued July 25, 2006)
11. **Periodic Monitoring** – The permittee shall perform a daily visual evaluation, Monday through Friday, when operating, except when closed for holidays, on the enclosed flare and the engines. If such visual observation indicates any visible emissions, the permittee shall take corrective actions to eliminate the visible emissions. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR 60, Appendix A, Method 9 for six minutes. If the six minute VEE opacity average exceeds 10%, the VEE shall continue for an additional twelve minutes. If any of the six-minute averages during the 18 minutes exceeds 20% opacity, the VEE shall continue for one hour from initiation, to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations, VEE, and any corrective actions.
(9 VAC 5-80-110 E)
12. **Periodic Monitoring** – The permittee shall perform periodic visual evaluations of the candle flare once each day, Monday through Friday, when operating, except when closed for holidays, for compliance with the opacity standards for fuel burning equipment. If such periodic evaluations indicate any visible emissions, the permittee shall take appropriate action, immediately, to return the unit to normal operation such that no visible emissions exist. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR, Appendix A). If a method 22 evaluation and/or corrective action becomes necessary, the permittee shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five year period.
(9 VAC 5-80-110 E)

13. **Monitoring Device Observation** – To ensure good performance, the open flare and the enclosed flare monitoring devices used to continuously measure gas flow and flare operating temperature shall be observed by the permittee with a frequency of not less than once per operating day, or another unit-specific frequency as recommended by the control equipment manufacturer. The permittee shall keep a log of the observations, or continuously record measurements of the gas flow rate and the flare temperature.
(9 VAC 5-80-110, 40 CFR 60.756 and Condition 6 of NSR Permit issued July 25, 2006)
14. **Monitoring Equipment** – The satisfactory operation of the monitoring equipment shall comply with Subpart WWW (40 CFR 60.752 and 40 CFR 60.756) including certification that manufacturer's written requirements or recommendations for installation, operation and calibration of the devices have been followed.
(9 VAC 5-80-110, 9 VAC 5-50-40, 40 CFR 60.752 (b) and Condition 19 of NSR Permit issued July 25, 2006)
15. **Monitoring for NSPS Compliance** – The permittee shall demonstrate compliance with operational standards for the GCCS required by Subpart WWW (40 CFR 60.753) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). The permittee shall demonstrate compliance of the GCCS requirements of Subpart WWW (40 CFR 60.752) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). All reports required to demonstrate compliance with the compliance requirements of Subpart WWW (40 CFR 60.755) shall be prepared and submitted to the Tidewater Regional Office as required by Subpart WWW (40 CFR 60.757 (f)(1)-(f)(6)).
(9 VAC 5-80-110, 40 CFR 60.753 – 60.757 and Condition 20 of NSR Permit issued July 25, 2006)

C. Recordkeeping

1. **Well Inspections** – The permittee shall record and maintain a log of well inspections that indicate a positive pressure had existed and the corrective action taken to alleviate an abnormal condition at the wellhead. Exceptions to this requirement include; a fire or increased well temperature, use of a geomembrane or synthetic cover, or a decommissioned well.
(9 VAC 5-80-110 and 40 CFR 60.753 (b)(1) – 753 (b)(3))
2. **Surface Monitoring Plan** – The permittee shall develop and maintain a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.
(9 VAC 5-80-110 and 40 CFR 60.753 (d))
3. **Design Capacity** – The permittee shall keep for at least 5 years, current, readily accessible, on site records of the design capacity report, based on the original report, dated June 7, 1996, the current amount of waste in place, and the annual placement rates for solid waste. Off site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats, approved by DEQ, are acceptable.
(9 VAC 5-80-110 and 40 CFR 60.758 (a))

4. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit and 40 CFR 60.758. The content and format of such records shall be arranged with the Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of landfill gas, calculated, monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual placement of MSW in the landfill, calculated, monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. All visual emissions observations and evaluations for the GCCS system: flares and engines including the date and time of the observations, whether or not visible emissions were noted, the results of any Method 9 or Method 22 VEE's and any corrective action taken.
 - d. The latest stack test results for the enclosed flare, indicating the NMOC destruction efficiency or NMOC concentration less than 20 ppmvd, as hexane at 3% oxygen.
 - e. The content and format of any such additional records shall be arranged with the Tidewater Regional Office. All records required by this condition and Subpart WWW (40 CFR 60.758) shall be available for inspection by the DEQ and shall be current for the most recent five years.
 - f. A copy of the July 25, 2006 permit shall be maintained on the premises of the facility to which it applies. (9 VAC 5-80-110 and Condition 27 of NSR permit issued July 25, 2006).
 - g. Operating hours for the Waukesha emergency generator.
- All records required by this condition and Subpart WWW (40 CFR 60.758) shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR 60.758 and Condition 16 of NSR Permit issued July 25, 2006)
5. **Operating Parameters** – The permittee shall maintain for 5 years, readily accessible continuous records of the following monitoring observations:
- a. Well head gauge pressures measured monthly.
 - b. Wellhead temperatures measured monthly.
 - c. Wellhead nitrogen or oxygen concentrations measured monthly.
 - d. Flow rate of the landfill gas to the control system.
 - e. Maintain information on exceedances related to the quarterly surface methane monitoring.
 - f. Malfunction reports for control or collection devices.
- (9 VAC 5-80-110 and 40 CFR 60.753 (c) & (d) and 40 CFR 60.758 (c))

6. **Collection System** – The permittee shall keep for the life of the collection system an up to date, readily accessible plot map showing each existing and planned collector in the system. This map shall also provide a unique identification location label for each collector. Additionally, the permittee shall maintain readily accessible records of the installation date and location of all newly installed collectors.
(9 VAC 5-80-110 and 40 CFR 60.758 (d))
7. **Collection System** – The permittee shall maintain for 5 years, readily accessible records of all collection and control system exceedances of the operational standards, including the readings taken in later months showing a return to compliance, and the location where the exceedance occurred.
(9 VAC 5-80-110 and 40 CFR 60.758 (e))
8. **Malfunction** – The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the landfill gas collection and control system, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative for more than one hour.
(9 VAC 5-80-110 and 40 CFR 60.758 (c)(1))
9. **Training Records** - The permittee shall maintain records of the required training including a statement of time, place and nature training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the combustion equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site for a five year period and made available for inspection by the DEQ.
(9 VAC 5-80-110)

D. Testing

1. The enclosed flare shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the enclosed flare stack and safe sampling platforms and access shall be provided.
(9 VAC 5-50-30 and 9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(iii)(B) and Condition 17 of NSR permit issued July 25, 2006)
2. **Nitrogen Testing** - If measured, the nitrogen level at each wellhead shall be determined by using Method 3C.
(9 VAC 5-80-110 and 40 CFR 60.753 (c)(1))
3. **Oxygen Testing** - The Oxygen level at each wellhead shall be determined by an oxygen meter using Method 3A or 3C, except for the following:
 - a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.
 - b. A data recorder is not required.

- c. Only a zero and a span calibration gas are required. Ambient air may be used as span.
 - d. A calibration error check is not required.
 - e. The allowable sample bias, zero drift, and calibration drift are +/- 10%.
(9 VAC 5-80-110 and 40 CFR 60.753 (c)(2))
4. **Exit Velocity** – Concurrently with the visible emissions performance tests on the open flare designated P001A, the actual exit velocity of the open flare shall be determined by Reference Methods 2, 2A, 2C or 2D as appropriate, by the unobstructed (free) cross sectional area of flare tip.
(9 VAC 5-80-410 and 40 CFR 60.18 (f)(3))
5. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)
6. **Stack Testing** – Initial and subsequent performance tests shall be conducted for NO_x and CO from the Caterpillar 3516 engine/generators to determine compliance with the emission limits contained in this permit. The tests shall be performed on one engine, while operating on treated landfill gas only. The tests shall be performed at not less than 80% of the rated capacity of the electrical output on the engine. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum expected operating rate for the facility, but in no event later than 180 days after start-up of the complete engine installation. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Tidewater Regional Office within 60 days after test completion.
(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410 and Condition 18 of NSR permit issued July 25, 2006)

E. Reporting

1. On March 1st and September 1st of each year, routine reports required by the Landfill MACT and the NSPS for the operation of the GCCS shall be submitted to the DEQ. Other non-routine reports, based on construction or operating situations are described below.

Report Name	Periods Covered	Report Due Dates	Ref. Condition Nos.	Regulation Citations
NSPS Compliance	Jan, 1 st to Jun. 30 th Jul. 1 st to Dec. 31 st	March 1 st & Sept. 1 st	III.A.10, III.A. 20, III.B.15	40 CFR 60.753 to 60.757
Landfill MACT, SSM Report	Jan, 1 st to Jun. 30 th Jul. 1 st to Dec. 31 st	March 1 st & Sept. 1 st	III.A.20, III.E.1	40 CFR 63.1980
Gas Well as-built Update Report	Within 60 days of construction	As required by construction activity	III.A.1	40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 753
Semi-annual Monitoring	Jan, 1 st to Jun. 30 th Jul. 1 st to Dec. 31 st	March 1 st & Sept. 1 st	VII.C.3	9 VAC 5-80-110

2. GCCS Report Detail

- a. Instances when positive pressure at a wellhead occurred due to efforts to avoid a fire. If no such instances occur, the permittee shall submit a negative report.
 - b. Values and time periods for exceedances of pressure, temperature, nitrogen or oxygen measurements at wellheads. Exceptions exist for pressure where a geomembrane or synthetic cover is used and for decommissioned wells.
 - c. Any periods of control equipment malfunction or diversion of the landfill gas stream exceeding one hour, including dates and the duration of the control equipment outage.
 - d. All instances when the GCCS was not operating for more than five consecutive days.
 - e. All instances where surface methane concentration exceeded 500 ppm; the actual concentration recorded and the location on the plot plan of that exceedance.
 - f. Records of GCCS expansion, including dates, locations and equipment installed in the process of expanding the GCCS.
 - g. Startup, shutdown and malfunction (SSM) plan activity reports.
- (9 VAC 5-50-410, 40 CFR 60.757 (f), 40 CFR 60.753 (b)(1) and 40 CFR 63.1980)
3. The permittee shall furnish written notification to the Director, Tidewater Regional Office of the anticipated dates of performance tests, postmarked at least 30 days prior to the date of the tests.

Copies of these written notifications shall be sent to:

Chief, Air Enforcement Branch (3AT20)
U. S. Environmental Protection Agency
Region III, 1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

(9 VAC 5-50-410 and 40 CFR 60.7 (a))

F. Requirements for Landfill Closure

1. The GCCS may be capped or removed provided that all of the following conditions are met:
 - a. The landfill shall be a closed landfill. A closed landfill is defined as a landfill in which solid waste is no longer being placed and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed in the General Provision of 40 CFR 60. A closure report shall be submitted to the DEQ and the Administrator as provided in 40 CFR 60.757 (d).
 - b. The GCCS shall have been operating for at least 15 years.
 - c. The calculated NMOC gas production shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart and no more than 180 days apart.

(9 VAC 5-50-410, 40 CFR 60.752 (b)(2)(v) and 40 CFR 60.757 (d))

2. The permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed using the following formula:

$$[M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} \times C_{\text{NMOC}}] \quad \text{where:}$$

M_{NMOC} = mass emission rate of NMOC, Megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, ppmv as hexane

- a. Q_{LFG} shall be determined by measuring the total landfill gas flow rate at the common header pipe to the control device using a gas flow measuring device calibrated according to the provisions of 40 CFR 60, Appendix A, Method 2E, Section 4 or other methods approved by the Administrator.
- b. C_{NMOC} shall be determined by collecting and analyzing landfill gas sampled from the common header pipe using Method 25C, Method 18 or any other method approved by the Administrator. The minimum list of compounds shall be those published in the most recent version of AP-42 for Method 18. The sample location on the common header shall be located upstream of any condensate removal or other refining units. The permittee shall divide the NMOC concentration (as methane) from Method 25C by six to obtain the NMOC concentration as hexane.

(9 VAC 5-50-410 and 40 CFR 60.754 (b))

3. The permittee shall submit the closure report to DEQ and the Administrator within 30 days of waste acceptance cessation. DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E & F and 40 CFR 258.60. If a closure report has been submitted to the DEQ, no additional wastes may be placed into the landfill without filing a notification of modification.

(9 VAC 5-50-410 and 40 CFR 60.757 (d))

4. The permittee shall submit an equipment removal to DEQ and the Administrator 30 days prior to removal or cessation of operation of the control equipment. The report shall contain the following:

- a. A copy of the closure report.
- b. A copy of the GCCS startup report demonstrating that the 15 year minimum control period has expired.
- c. Dated copies of 3 successive NMOC emission rate reports demonstrating the landfill is no longer producing 50 Mg or greater of NMOC per year.

DEQ may request additional information to verify that all conditions for removal have been met.

(9 VAC 5-50-410 and 40 CFR 60.757 (e))

IV. Facility Wide Conditions

A. Limitations

1. The opacity standard (visible emission standard) shall apply at all times except during periods of startup, shutdown and malfunction.

(9 VAC 5-50-20 A and 9 VAC 5-80-110)

2. At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Virginia Department of Environmental Quality, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of the source.
(9 VAC 5-50-20 E, 9 VAC 5-50-380, 9 VAC 5-20-180 A, and 9 VAC 5-80-110)
3. In case of shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one hour, the intent to shut down such equipment shall be reported to the board and local air pollution control agency, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:
 - a. Identification of the specific facility to be taken out of service as well as its location and permit or registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period, and,
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.
(9 VAC 5-50-380, 9 VAC 5-20-180 C and 9 VAC 5-80-110)
4. In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as is practicable but no later than four daytime business hours, notify the board by facsimile transmission, telephone or electronic mail of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. The use of email is an approved method of meeting the 14 day written notification. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the board.
(9 VAC 5-50-380, 9 VAC 5-50-180 C and 9 VAC 5-80-110)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
PW-1	Parts Washing Station	9 VAC 5-80-720B	VOC	16 - 20 gallons
T1 – T6	Engine Oil Day Tanks	9 VAC 5-80-720B	VOC	25 gallons
T7	Engine Oil Tank	9 VAC 5-80-720B	VOC	1500 gallons
T8	Used Oil Tank	9 VAC 5-80-720B	VOC	1500 gallons
T9	Engine coolant (propylene glycol)	9 VAC 5-80-720B	VOC	750 gallons
CBV-1	Crankcase Breather Vent	9 VAC 5-80-720C	PM10	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed in compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart WWW	Landfill NSPS	Engines combusting 'treated' landfill gas are not subject to the NSPS testing, monitoring, recordkeeping and reporting requirements.
40 CFR 63, Subpart AAAA	Landfill MACT	Recordkeeping and reporting requirements of the Landfill MACT do not apply to fuel burning units that combust 'treated' landfill gas (the Caterpillar engines).
40 CFR 63, Subpart ZZZZ	RICE MACT	The RICE MACT only applies to engines that are co-located at a major HAP source. The Bethel Landfill is not a major source for HAP emissions.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
- (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or electronic mail of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 4. Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
 - e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
 - f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
- (9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

VIII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. 9 VAC 5, Chapter 50, Part II Article 2: Standards of Performance for Odorous Emissions.
2. 9 VAC 5, Chapter 50, Part II, Article 3: Standards of Performance for Toxics Pollutants.
(9 VAC 5-80-110 N and 9 VAC 5-80-300)